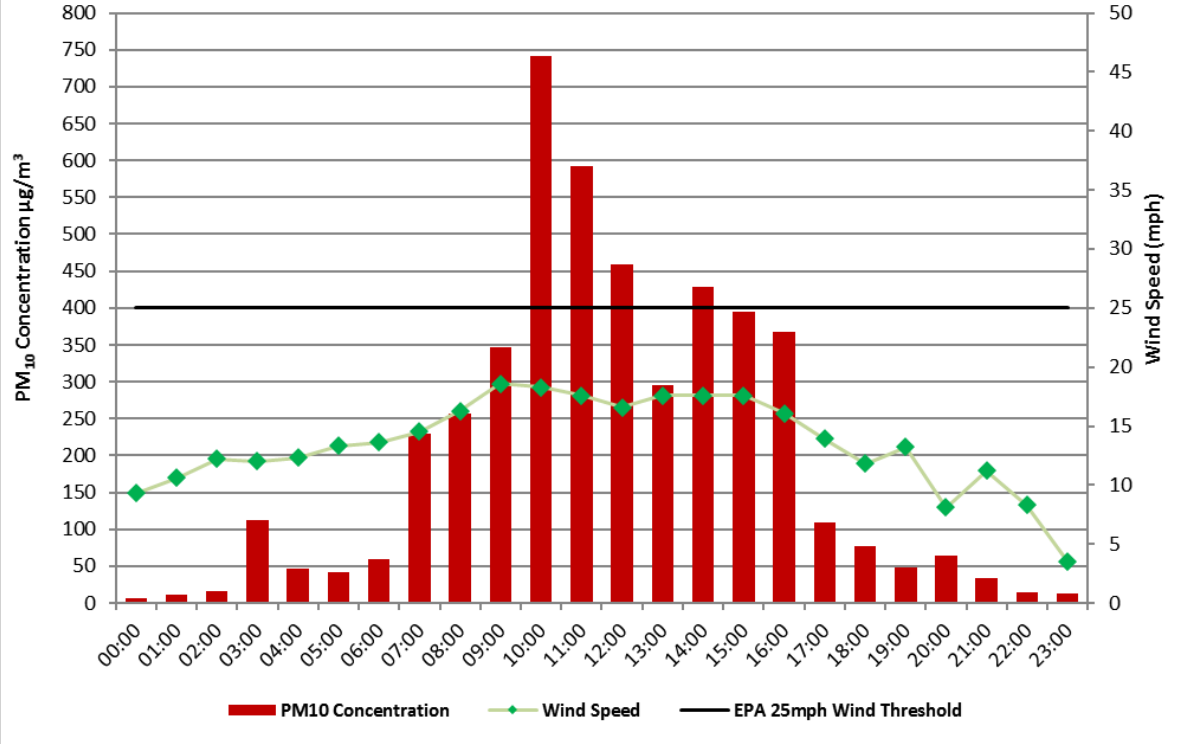
Appendix C
Correlated PM_{10} Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds[1] and PM_{10} concentrations at select monitoring sites within the Salton Sea Air Basin on December 14, 2015. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SELECT SITES
(FIGURES C-1 to C-5)

FIGURE C-1
WESTMORLAND
PM_{10} CONCENTRATION & WIND SPEED CORRELATION
DECEMBER 26, 2015



Figs C-1 through & C-5: Westmorland, Brawley, El Centro, and Niland sites recorded increased levels of PM_{10} as winds speeds increased during the morning and afternoon hours on December 26, 2015. All air quality data from the EPA's AQS data bank. Wind data for Westmorland, Niland, and El Centro from the EPA's AQS system. Imperial County Airport wind data from the NCEI's QCLCD system

[1] National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); https://w1.weather.gov/glossary/index.php?letter=w

FIGURE C-2
WESTMORLAND
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

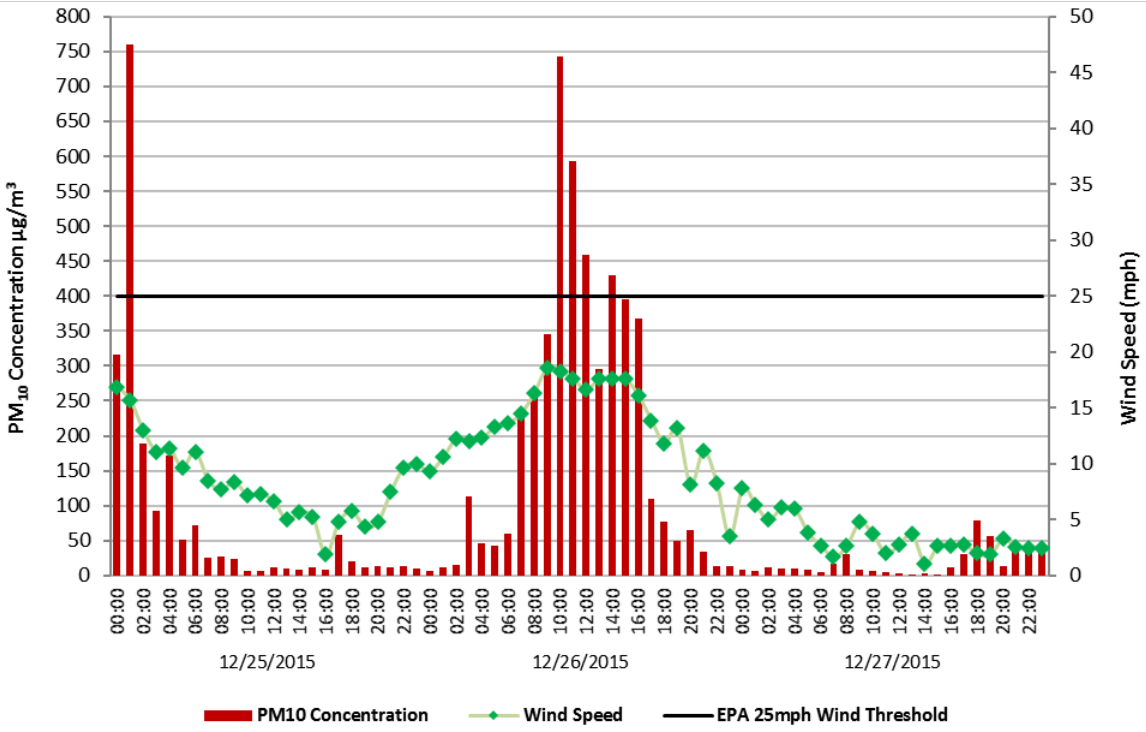


FIGURE C-3
BRAWLEY
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

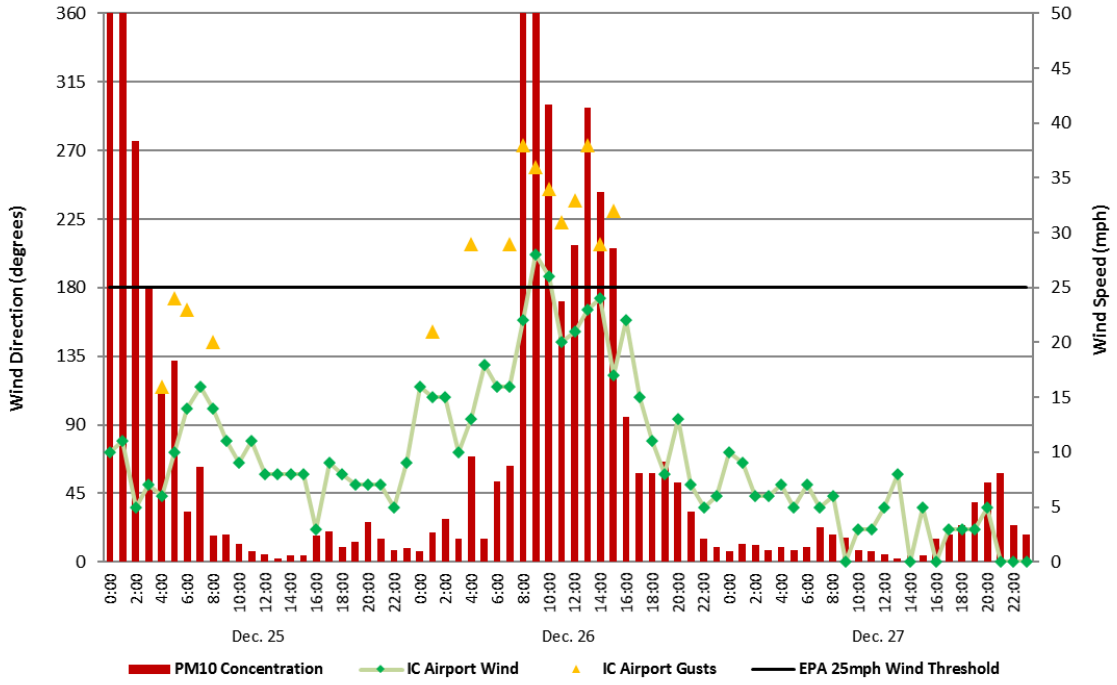


FIGURE C-4
NILAND (ENGLISH RD)
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

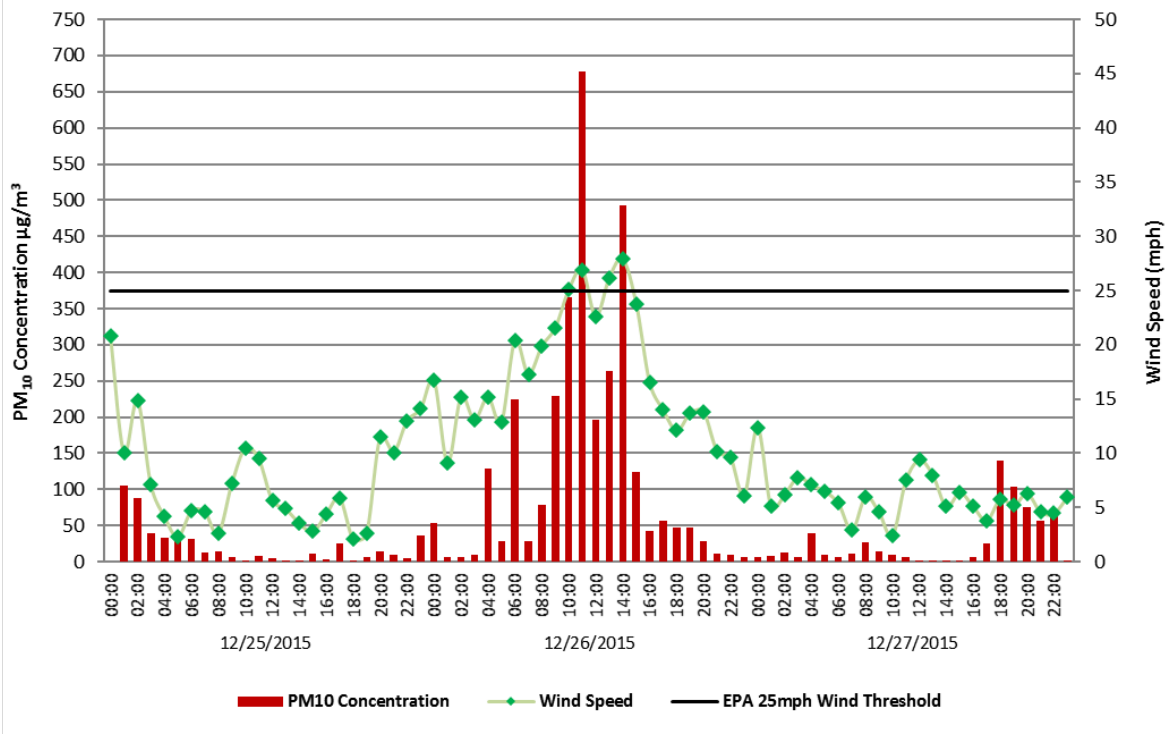
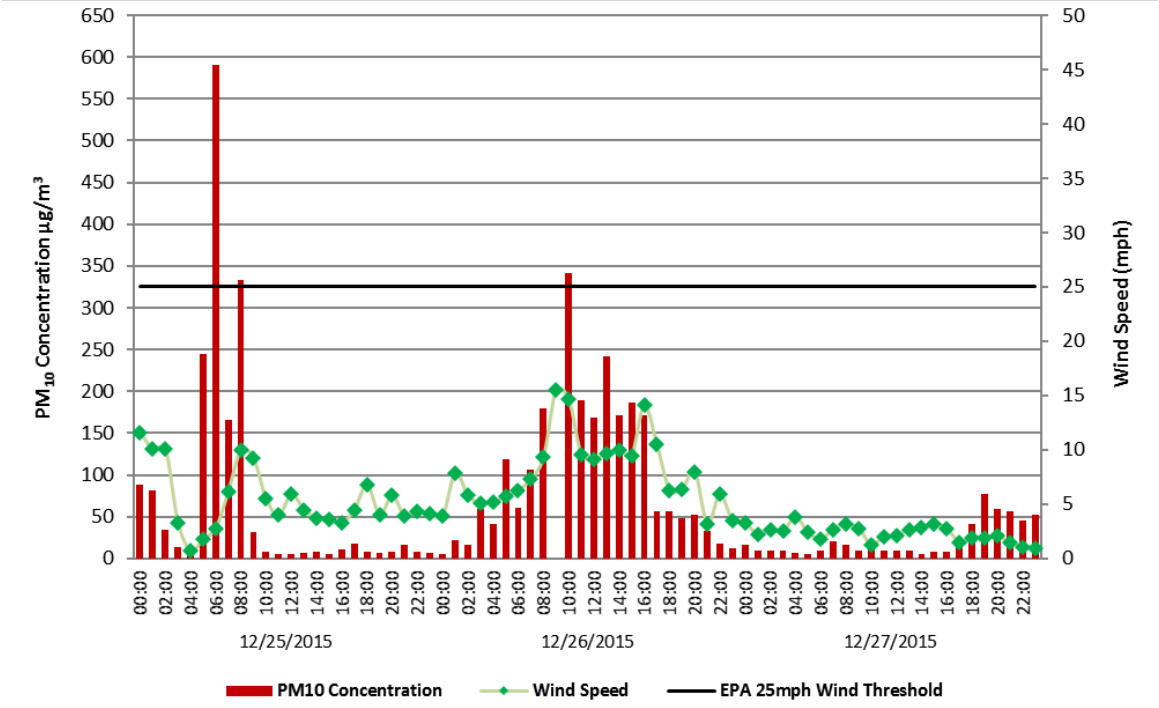


FIGURE C-5
EL CENTRO (9TH ST)
PM_{10} CONCENTRATION & WIND SPEED CORRELATION



EASTERN RIVERSIDE COUNTY SITES

FIGURE C-6
TORRES-MARTINEZ TRIBAL
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

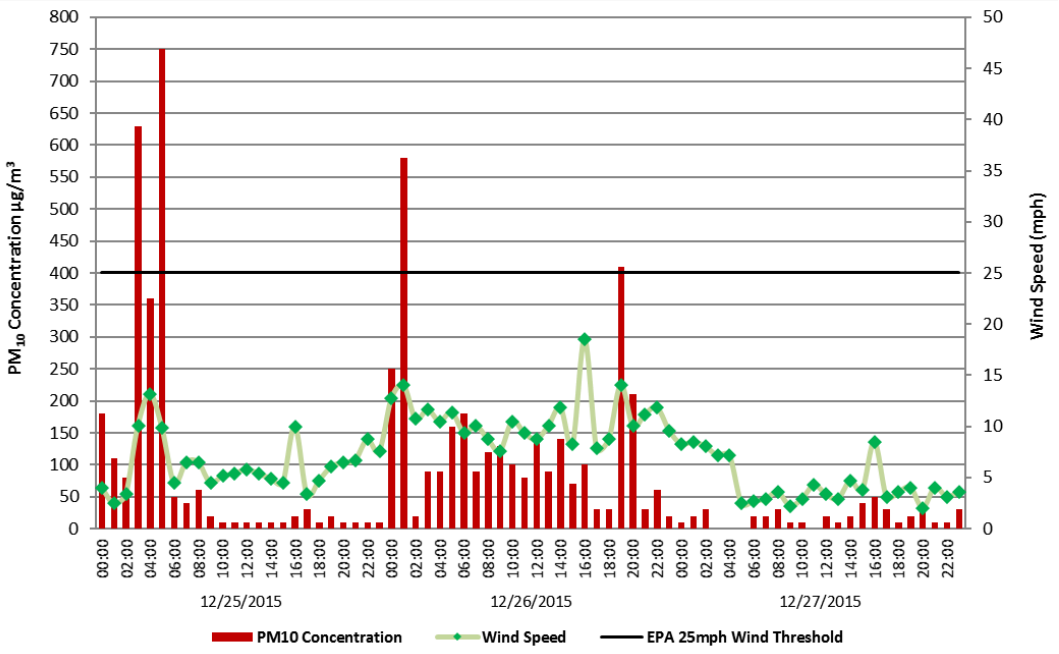


FIGURE C-7
INDIO (JACKSON ST)
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

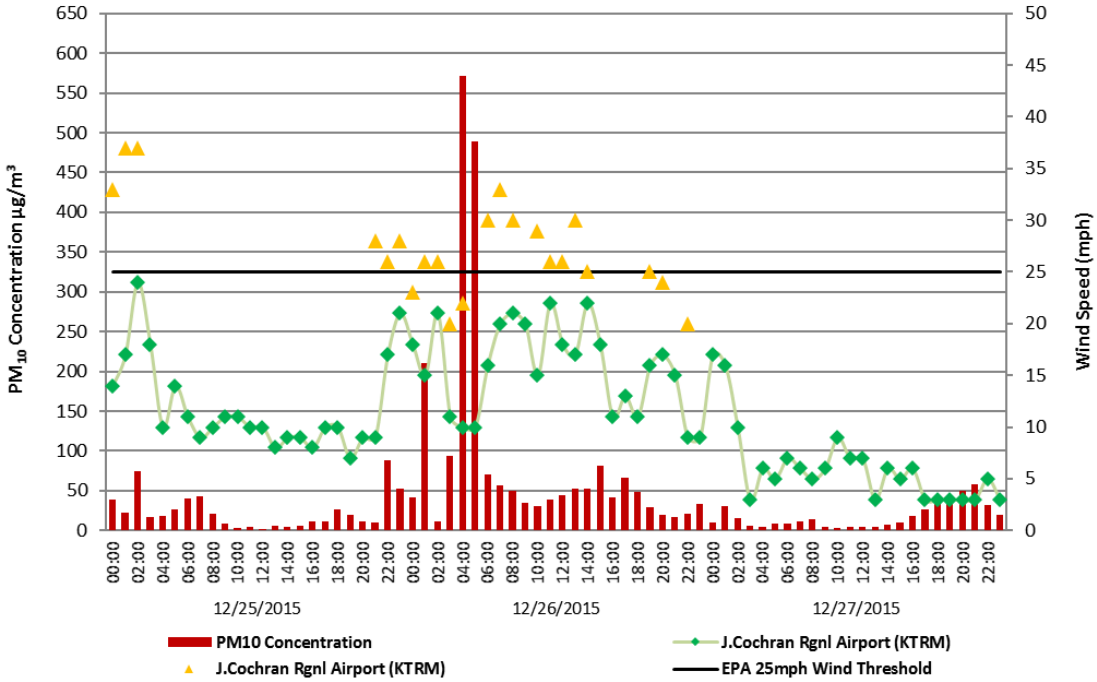
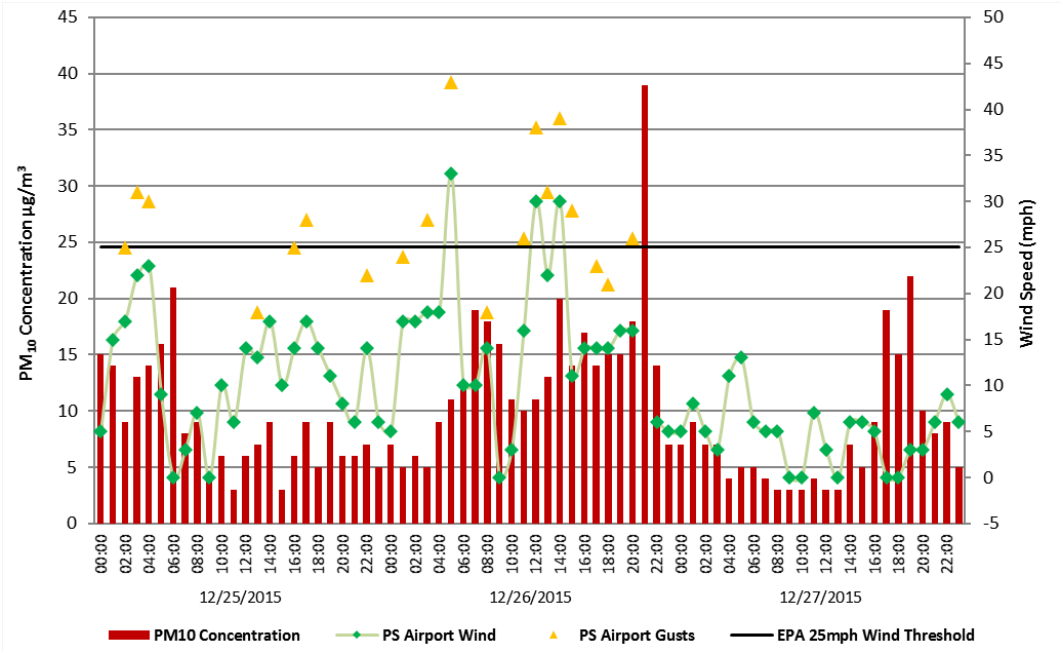


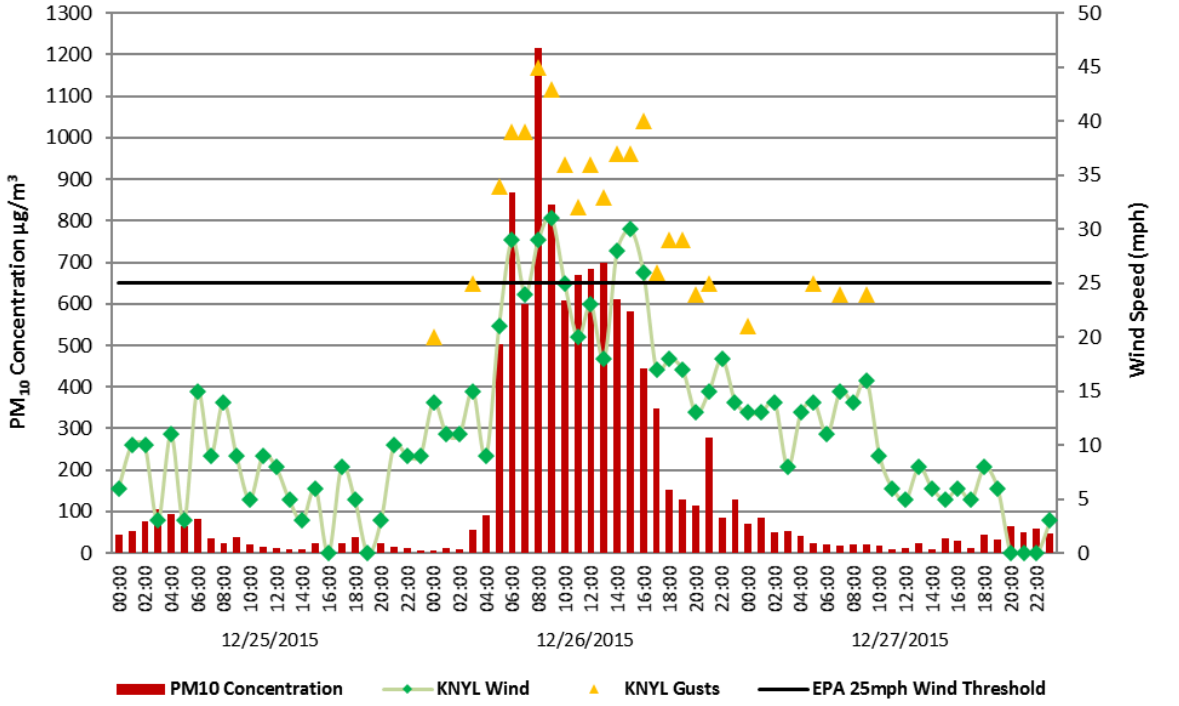
FIGURE C-8
PALM SPRINGS FIRE STATION
PM_{10} CONCENTRATION & WIND SPEED CORRELATION



Figs C-6 through C-8: All monitoring sites in eastern Riverside County displayed a similar correlation between increased wind speeds and gusts, and an increase in PM_{10} levels. Torres-Martinez Tribal wind data from the EPA's AQS data bank. Wind data for Indio (Jackson St) and Palm Springs Fire Station from the NCEI's QCLCD system

SOUTHWESTERN ARIZONA

FIGURE C-9
YUMA, ARIZONA SUPERSITE
PM_{10} CONCENTRATION & WIND SPEED CORRELATION



Figs C-9: Yuma Supersite in Yuma, Arizona, located downstream from Westmorland in the southwestern portion of Arizona, saw corresponding increases in particulate matter as wind speed increased during the day. Wind data from the NCEI's QCLCD system. Yuma is MST